

H 3544 PCT/US  
Serial No. 09/857,638

In the Claims

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1-11. (Cancelled)

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12. (Currently amended) An adhesive comprising one or more organic polymers and one or more paramagnetic or superparamagnetic [ferromagnetic] nanoparticles having a particle size of from 1 to 1000 nm.

13. (Original) The adhesive of claim 12, comprising 0.1% to 50% by weight of the nanoparticles.

14. (Currently amended) The adhesive of claim 12, wherein the nanoparticles comprise at least one compound selected from the group consisting of oxides of Fe, Co, Ni, Cr, Mo, W, V, Ta, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, [oxides of said elements,] ferrites of said elements except iron, and mixtures thereof.

15. (Currently amended) The adhesive of claim 12, wherein the nanoparticles comprise [magnetite,] macchiemite, goethite, or a ferrite of the general formula  $\text{MeOFe}_2\text{O}_3$ , wherein Me represents an element selected from the group consisting of Mn, Co, Ni, Cu, Zn, Mg or Cd, and mixtures thereof

16. (Original) The adhesive of claim 12, in the form of a pressure sensitive adhesive or a contact adhesive.

17. (Original) The adhesive of claim 12, in the form of a hot melt adhesive or a dispersion adhesive.

18. (Original) The adhesive of claim 12, wherein the one or more organic polymers comprise one or more synthetic organic polymers selected from the group consisting

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of polyacrylates, polymethacrylates, polyoxy-alkylenes, polyurethanes, polyesters, polystyrene, polyethylene, polyvinyl esters, ethylene-vinyl acetate copolymers, and mixtures thereof.

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19 (Original) The adhesive of claim 18, wherein the one or more synthetic organic polymers comprise an ethylene-vinyl acetate copolymer or a mixture of two or more such copolymers.

20. (Original) The adhesive of claim 12, wherein one or more of the nanoparticles are bonded ionically, coordinatively or covalently to one or more of the organic polymers.

21. (Currently amended) A process for preparing an adhesive composition, comprising combining and mixing one or more organic polymers and one or more paramagnetic or superparamagnetic [ferromagnetic] nanoparticles, and optionally one or more solvents or further additives, to form the adhesive composition.

22. (Currently amended) A method of temporarily or permanently binding two or more substances together, comprising the steps of applying to one or more surfaces of the substrates an adhesive comprising one or more paramagnetic or superparamagnetic [ferromagnetic] nanoparticles having a particle size of from 10 to 300 nm and contacting the one or more substrate surfaces with applied adhesive with one or more other surfaces of the substrates to bind the substrates.

23. (Original) The adhesive of claim 13, comprising 0.1% to 40% by weight of the nanoparticles.

24. (Original) The adhesive of claim 23, comprising 0.1% to 30% by weight of the nanoparticles.

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25. (Original) The adhesive of claim 24, comprising 0.1% to 20% by weight of the nanoparticles.

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